Best Management Practices for Scrap Recyclers

1. Non-Storm Water Discharges

a. The following uncontaminated non-storm water discharges are allowed:

Water line flushing, landscape irrigation, diverted stream flows, uncontaminated groundwater infiltration, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, and fire fighting.

Care will be taken to ensure that these allowable non-storm water discharges are not exposed to industrial materials or activities that could contaminate the water.

b. Washing of building sides and roofs, vehicles, and equipment:

1. Each vehicle or piece of equipment associated with the facility's operations may be washed up to six times during any six-month period.

2. Any washwater with a visible oily sheen will be treated to remove the sheen prior to discharge of the washwater to surface water or groundwater.

3. Washing of building sides and roofs, vehicles, and equipment will occur on or near grass, soil, or gravel areas to the maximum extent practicable to allow washwater to seep into the soil and avoid the direct discharge of solids and particulate matter to surface waters. Significant accumulations of solids and particulate matter in areas used for washing activities or subject to erosion will be periodically removed or otherwise properly managed to avoid transport to surface waters. Degreasing activities will not be conducted on pervious surfaces.

4. When washing activities occur on impervious surfaces, suspended solids and particulate matter will be controlled by (1) directing washwater to a settling basin, tank, or other settling device to remove suspended solids and particulates prior to discharge to surface waters or a seepage area, (2) temporarily blocking, barricading, or plugging areas of channelized flow to surface waters, such as storm sewers, and allowing suspended solids and particulate matter to settle out prior to discharge to a surface water or seepage area, or (3) directing washwaters to grass, soil, or gravel areas where the water can seep to groundwater. Solids and particulate matter collected in a settling device or area will be periodically removed or otherwise properly managed to avoid transport to surface waters.

5. When washing the sides and roofs of buildings, dirt and paint deposits will be cleaned up, where practicable, prior to the next storm event.

6. Biodegradeable soap or detergent with a phosphorus content of 0.5% or lower will be used for washing activities. Nonbiodegradable cleaning additives (such as degreasing chemicals) will not be used for washing vehicles or equipment where there is discharge to surface water or groundwater.

7. Washwater with a oil and grease sheen resulting from incidental contact with an engine or oily piece of equipment that is not associated with a degreasing activity will be treated with an oil absorbent material or an oil/water separator device to remove the sheen prior to discharge. Oil absorbent materials will be replaced on a periodic basis to ensure absorbency capacity and oil treatment devices will be maintained on a periodic basis to remove collected oils and grease and ensure proper operation. Used absorbents will be recycled or properly disposed of.

8. Discharges from the steam or high pressure water degreasing of engines or oily pieces of equipment will be conveyed to an oil/water separator device, or equivalent measure, prior to discharge, except in cases of emergency degreasing associated with equipment malfunction. Oil treatment devices, or equivalent measures, will be maintained on a periodic basis to remove collected oils and grease and ensure proper performance.

9. Washwater from the emergency degreasing of engines or oily pieces of equipment associated with equipment malfunction will be captured and containerized to the maximum extent possible and treated with an oil/water separator or oil absorbent material prior to discharge. A written record will be maintained by the permittee of all instances of emergency degreasing, detailing the date of occurrence, person performing the cleaning, how the washwater was treated and discharge location (groundwater or surface water).

10. The following washing activities are not allowed:

- Discharge of washwater that would impair the water quality of a downstream wetland (NR 103), outstanding resource water (NR 102.10), or exceptional resource water (NR 102.11).
- Discharge of pollutants in washwater in quantities that are harmful to off-site animals, plants, or aquatic life, or that would violate surface water quality standards (NR 102 and NR 105) or groundwater quality standards (NR 140).
- Use of degreasing agents containing halogenated hydrocarbons or bio-accumulating toxic substances.
- Washing buildings with asbestos siding or shingles or lead-based paint.

c. All other non-storm water discharges, including process wastewater, cooling water, and building sink and floor drain discharges, will either be eliminated or covered under a separate WPDES permit.

2. Inbound Scrap Materials

a. Those materials that pose a threat to the facility or environment will be identified in writing. The list will include materials that may not be accepted at the facility, and materials that are accepted but require special handling. The special handling procedures will be outlined. This information will be shared with employees and suppliers.

b. Incoming scrap loads will be inspected for materials referred to in 2(a) above by a facility employee at the scale or when unloaded.

c. Facility truck drivers picking up a scrap load at another facility will conduct an initial inspection before hauling the scrap to the facility.

d. Inspection procedures will be distributed or otherwise made available to employees.

e. The facility will provide appropriate training to employees on the inspection procedures.

3. Water Priority Chemicals, Batteries, and Used Fluids.

a. All water priority chemicals as listed in Section 313, Title III, of the Emergency Planning and Community Right-to-Know Act (EPCRA) and new and used fluids will be stored in proper containers that are covered (except when in use) and located under roof; or in outside liquid-tight containments that prevent exposure to storm water runoff.

b. The facility will comply with all applicable container, labeling, and secondary containment regulations.

c. A careful visual inspection by a facility employee will be conducted before rainwater is released from a secondary contaminant system for new or used petroleum products. The water will be released only if there are no signs of contamination. A visual inspection report will be written in a log for each draining of a secondary containment system.

d. Lead acid batteries will be handled, stored, and packaged as follows:

1. Damaged Batteries: Cracked or broken batteries will receive special handling. If any acid leaks, it will be neutralized with sodium carbonate, soda ash, or other absorbent material.

2. Storage: Batteries will be stored inside on an impervious surface off the floor on pallets, or in a leak-proof container, or outside in a covered leak-proof container. The batteries stored on pallets will be stacked upright, up to 3 rows high, with cardboard between the layers. The batteries will not protrude over the edge of the pallets.

3. Packaging: For shipment, batteries will be either wrapped in plastic, banded to a pallet, or placed in a leak-proof container.

4. Sediment Deposits on Impervious Surfaces

a. All accessible paved areas will be swept as needed to prevent the accumulation of sediment deposits.

b. Catch basin inserts or filter systems may be installed in storm sewer inlets or catch basins to trap incoming sediment and metal particles. The inserts will be cleaned and replaced as needed to maintain their effectiveness.

5. Obsolete Debris and Equipment

a. Non-salvageable equipment and debris (excluding equipment being retained for parts or re-use) will be properly disposed of or scrapped within a reasonable period of time, but not longer than one year.

6. Spills and Leaks

a. Spill kits, in most cases consisting of granular absorbents (oil dry), absorbent socks, absorbent pads, a drip pan, a broom, and shovel, will be placed at locations where a spill or leak could occur. These locations may include areas used for:

1. Equipment and vehicle maintenance
2. Fluid storage
3. Fueling
4. Loading and unloading
5. Processing equipment
6. Storage of oily scrap

b. If a spill or leak occurs, facility employees will use absorbents or drip pans to contain the fluid. The spent absorbent will be promptly cleaned up and placed in a covered container. Used absorbents will be properly disposed of.

c. Spill control procedures will be developed for maintenance activities, fueling operations, equipment, and accidents. Employees will be trained to properly handle materials, to respond to and contain a spill, to clean up and dispose of used absorbents, and to prevent future leaks and spills.

d. Where applicable, facilities will meet spill prevention, control and countermeasure (SPCC) plan requirements.

e. Facilities will meet the spill reporting and notification requirements set forth in NR 706 of the Wisconsin Administrative Code.

7. Erosion and Sediment Sources: Non-Structural Control

a. A protective vegetative cover will be maintained, where possible, in unpaved areas that are not disturbed by industrial activity.

b. Scrap will not be stored in highly erosive areas such as steep slopes, river banks, or channels.

c. In unpaved industrial areas subject to erosion, non-structural measures such as the placement of crushed stone or gravel, catch basin inserts, silt fences, hay bales, vegetation, and soil stabilization measures (geotextile fabrics, mulches, etc.) will be used to prevent sediment runoff. Non-structural measures will be periodically inspected and maintained as needed to provide good performance.

8. Ferrous and Non-Ferrous Turnings and Borings

a. All turnings and borings will be stored in non-leaking containers, on an appropriately designed hard surface pad, or indoors.

b. If exposed to storm water, the containers and pad will be designed and sized to hold the storm water runoff from a 3.5-inch, 24-hour storm.

c. Accumulated storm water runoff from turnings and borings, which may be contaminated with free oil, emulsified oil, dissolved oil, and metals, will be treated or disposed of in one of the following ways:

1. Removed by a vendor for offsite treatment, recycling, or disposal.

2. Treated by an oil-water separator, and then discharged to a surface water drainage system, or to a sanitary sewer. This option is not approved if the water is contaminated with emulsified or dissolved oils.

3. Onsite treatment with an evaporation system, with the condensed fluid receiving onsite or offsite treatment, recycling, or disposal.

4. Onsite treatment with an ultrafiltration system, or appropriate physical-chemical treatment system, with the effluent being discharged to either a surface water drainage system, or to a sanitary sewer. Depending on the option selected, a separate WPDES permit and/or a permit from the local sanitary district may be required.

d. Any accumulated drainage of oil from turnings and borings, such as during the transport, transport, or temporary placement of the scrap, will be collected and placed in a liquid-tight containment system. Absorbent materials may be used to collect the fluid.

9. Residual Fluids and Particulates from Processing Operations and Equipment

a. Absorbents and appropriate containers will be used to control fluid leaks and spills during renovation, removal, installation, or operation of outdoor processing equipment.

b. Vehicles and equipment will be kept reasonably clean of oil and grease, fluids, metal particulates, and debris by wiping down, washing off-site, or washing on-site in accordance with BMP #1(b) above.

c. Appropriately designed hard surface containments will be provided for outdoor stationary equipment and for auto crushers that contain at least 50 gallons of hydraulic fluid or oil. At a minimum, an approximate 4" high curb or berm will be placed around the hydraulic rams (including hoses and reservoirs) to capture leaking or spilled fluids.

d. Appropriate spill prevention and response measures will be provided for portable and mobile equipment that contains fluids. Containment **may** be provided for portable and mobile equipment.

e. Containment pads will be periodically cleaned to remove accumulated debris and deposits. Accumulated water that is visibly contaminated, or where the operator has knowledge of contaminants being present, will either be removed and properly disposed of, and not discharged to surface water or groundwater, or treated to remove the contaminants.

f. A written preventive maintenance program will be developed for all processing and handling equipment and vehicles which could break down or fail, resulting in discharges of pollutants to surface or ground waters. The program will include:

- Schedule for periodic inspections
- Inspection forms and checklists
- Procedures and guidelines for replacing or repairing excessively worn, corroded, leaking, or damaged parts and materials.
- Schedule for major overhauls of equipment and vehicles.

10. Fluids from Scrap Automobiles, Motor Blocks, and Vehicle Parts

a. Leaks or spills of fluids from scrap vehicles brought into the facility for processing will be properly captured, managed, and disposed, recycled, or reused.

b. Fluids will be stored in labeled above ground tanks or drums. Used fluids can either be recycled for on-site use, or sent off-site for re-fining or fuel blending.

c. Oily parts will be stored in a liquid-tight, appropriately designed hard surface containment area or in non-leaking containers. The accumulated fluids will be properly disposed of, or properly treated to remove the contaminants, prior to discharge.

d. Hard surface containment areas will be designed and constructed to be geotechnically stable, to provide the strength and load support for specific operations, and to provide adequate drainage and storage volume for at least a 3.5-inch, 24-hour storm event.

11. Erosion and Sediment Sources: Structural Control

a. All facilities with unpaved operational areas will prepare a paving/capping plan which identifies areas to be paved and a proposed schedule. Areas to be paved may include areas that continue to erode despite non-structural controls, certain scrap storage areas, and roadways subject to erosion.

b. The following measures may be used to control sediment loadings:

1. Detention Basins
2. Oil-Water Separators
3. Storm Treat
4. Vortech/Stormceptor
5. Multi-Chamber Treatment Train
6. Sand Filters
7. Bio-Retention Zone
8. High Efficiency Pavement Sweeping
9. Indoor Enclosure
10. Infiltration System

c. The CCP consultant will work with the facility operator to determine the need for structural sediment controls and the best available options.

d. Structural control measures should be designed to accommodate the runoff from at least a 3.5-inch, 24-hour storm event.

e. Structural control measures will be periodically inspected, cleaned, and maintained to provide good performance.

12. Runoff Problems

a. Ponding or poor drainage that contributes to water pollution problems will be mitigated by regrading and/or providing drainage systems designed for the runoff from a 2.0-inch, one hour storm event.

b. All ditches and channels on the property will be properly sized and maintained to prevent scouring and erosion caused by high flow velocities.

13. Other Source Areas Identified in the SWPPP

a. Appropriate BMPs to be determined on a case-by-case basis. Prior to implementation, the BMP will be reviewed and approved by the CCP consultant.

14. Other Scrap Areas With a Significant Risk of Storm Water Contamination (Includes oily scrap, chopped wire, wire insulation, electrical components, ballasts, and shredder fluff)

a. Source areas will have no significant exposure to storm water, or

b. Appropriate BMPs will be installed to manage the pollutants. Prior to implementation, the BMP will be reviewed and approved by the CCP consultant.